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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,310	11/25/2003	Vittorio Mascolo	Q78649	4731

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EXAMINER
BHATIA, AJAY M

ART UNIT	PAPER NUMBER
2145	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/720,310	MASCOLO, VITTORIO
	Examiner	Art Unit	
	Ajay M. Bhatia	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-9 and 11-14* is/are rejected.

7)☒ Claim(s) *5,6 and 10* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *11/25/03*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Response to Arguments

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claims 5,6, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7-9, and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Falkenstein (U.S. Patent Publication 2002/0080445)

For claim 1, Falkenstein teaches, a method for using the complete resource capacity of synchronous digital hierarchy network, subject to protection mechanism, in the presence of a data (packet) network, said network comprising nodes bidirectionally transmitting time division multiplex (TDM) and data traffic over Working and Protection capacity/channels, wherein, in case of a failure at the affected nodes, said method comprising:

cutting the working capacity; (Falkenstein, paragraph 30, fault)

subjecting the TDM traffic to said protection mechanism, and shifting the TDM traffic

over the protection capacity; (Falkenstein, paragraphs 28, 29, protection)

shifting a part of high priority data traffic over the protection capacity; (Falkenstein,

paragraph 30)

and a part of low-priority data traffic, transported over the protection capacity in normal

conditions, shares a remaining protection capacity with a low-priority part of the data traffic,

transported over the working capacity in normal conditions, as wherein the complete protection

capacity is used to carry data traffic in both normal and failure condition. (Falkenstein, paragraph

84, rate of ports, paragraphs 139-145, adaptive protection)

For claim 2, Falkenstein teaches, the method according to claim 1, further comprising reserving a

part of the protection capacity to carry (Not pre-emptive Unprotected Traffic) (NUT) data traffic

during a normal condition and a failure condition. (Falkenstein, paragraph 56)

For claim 3, Falkenstein teaches, the method according to claim 1, wherein said sharing of the

remaining protection capacity for carrying the low priority data traffic made by applying a

function of statistical multiplexing to said low priority data traffic coming from both the working

capacity and the protection capacity, wherein in case of a failure there is only a service

degradation and no service interruption. (Falkenstein, paragraphs 139-145, adaptive protection)

For claim 4, Falkenstein teaches, the method according to claim 2, wherein said sharing of the remaining protection capacity for carrying the low priority data traffic is made by applying a function of statistical multiplexing to said low priority data traffic coming from both the working capacity and the protection capacity, wherein in case of a failure there is only a service degradation and no service interruption. (Falkenstein, paragraphs 139-145, adaptive protection)

For claim 7, Falkenstein teaches, the method according to claim 3, wherein said network nodes, an Actuator function is performed on a connection matrix of a cross-connect, whereby in case of a failure, new matrix connections to the protection capacity are established in order to restore the failed working capacity, said Actuator function causing the performing of the following actions on said protection capacity, in case of failure:

squelching partially the low priority traffic, present before the failure, and pre-empting only a part of the low priority traffic necessary for carrying said TDM and high priority data traffic; (Falkenstein, paragraphs 139-145, adaptive protection)

Bridge and Switch comprising action on the cross-connection matrix to restore the TDM and high priority data traffic and balancing the access for the low priority data traffic to the remaining spare capacity by said statistically multiplexing. (Falkenstein, paragraphs 139-145, adaptive protection)

For claim 8, Falkenstein teaches, the method according to claim 1, wherein said network is a ring network subject to a MS/Spring protection mechanism. (Falkenstein, paragraph 32)

For claim 9, Falkenstein teaches, a network node for carrying out the method of claim 1, wherein

said network node comprises:

a first switching element to switch the TDM traffic over the TDM part of the working,

channels, in the non-failure condition, or over the protection capacity in case of failure;

(Falkenstein, paragraph 30 fault)

a second switching element for the data traffic comprising circuits to perform the

following actions:

recognizing the class of service of the input data, wherein said input data comprises said

high or low priority data traffic; (Falkenstein, paragraphs 139-145, adaptive protection)

and assigning the data traffic to a correct output on said working or protection capacity in

both non-failure conditions, so as in failure conditions all the high priority data traffic is switched

over the protection capacity, and the low priority data traffic is switched over the protection

capacity according to said function of statistically multiplexing. (Falkenstein, paragraphs 139-

145, adaptive protection)

For claim 11, Falkenstein teaches, a synchronous hierarchy network, subject to a protection

mechanism, with a data (packet) network deployed over the synchronous digital hierarchy

network, said network comprising means for performing the method of claim 1. (Falkenstein,

paragraphs 139-145, adaptive protection)

For claim 12, Falkenstein teaches, a synchronous digital hierarch network subject to a protection

mechanism, with a data (packet) network deployed over the synchronous digital hierarch

network said, network comprising network nodes according to claim 9. (Falkenstein, paragraphs

139-145, adaptive protection)

For claim 13, Falkenstein teaches, the method for using the complete resource capacity of a

synchronous digital hierarch network, said network comprising nodes bi-directionally

transmitting time division multiplex (TDM) and data traffic over a working capacity and a

protection capacity, wherein in case of a failure, said method comprising:

     subjecting the TD traffic to said protection mechanism, and shifting the TDM traffic over

the protection capacity; (Falkenstein, paragraphs 28, 29,30, protection, fault)

     shifting data, having at least one of a first class of service from a working capacity and a

second class of service from a working capacity, to the protection capacity; (Falkenstein,

paragraphs 28, 29, protection)

     shifting data, having at least one of the second class of service from the working capacity

and a third class of service from the working capacity, to the protection capacity; (Falkenstein,

paragraph 30)

     wherein the protection capacity is shared by the data having at least one of the first class

of service from the working capacity and the second class of service from the working capacity,

the data having at least one of the second class of service from the working capacity and the third

class of service from the working capacity, and having the third class of service from the

protection capacity, wherein all of the protection capacity is used to carry data traffic.

(Falkenstein, paragraph 84, rate of ports, paragraphs 139-145, adaptive protection)

For claim 14, Falkenstein teaches, the method according to claim 13, wherein said class of service comprises high priority data having a guaranteed bandwidth, wherein said second class of service comprises medium priority data having guaranteed bandwidth and non-guaranteed bandwidth, and wherein said third class of service comprises best-effort data traffic having non-guaranteed bandwidth. (Falkenstein, paragraphs 139-145, adaptive protection)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached Notice of references cited (if appropriate).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
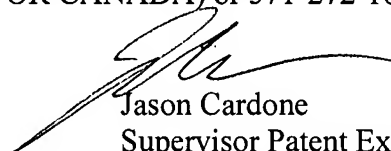
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay M. Bhatia whose telephone number is (571)-272-3906. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571)272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason Cardone
Supervisor Patent Examiner
Art Unit 2145

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